PATENT HPDNO: 200209704-1

## WHAT IS CLAIMED IS:

- 1. A computer system comprising:
  - a system module;
  - a test module;
  - a first cell; and
  - a second cell;

wherein the system module is configured to cause the test module to test the first cell subsequent to the second cell being allocated to a first instance of an operating system.

- 2. The computer system of claim 1 wherein the system module is configured to cause the first cell to be de-allocated from the first instance of the operating system prior to causing the test module to test the first cell.
- 3. The computer system of claim 2 wherein the system module is configured to cause the second cell to be allocated to the first instance of the operating system subsequent to causing the first cell to be de-allocated from the first instance of the operating system.
- 4. The computer system of claim 1 wherein the system module is configured to cause the test module to test the first cell in response to accessing a list that identifies floating cells.
- 5. The computer system of claim 1 wherein the system module is configured to cause the test module to test the first cell in response to accessing a list that identifies cells allocated to the first instance of the operating system.
- 6. The computer system of claim 1 wherein the test module includes a diagnostic test, and wherein the test module causes the first cell to be tested using the diagnostic test.

PATENT HPDNO: 200209704-1

7. The computer system of claim 1 wherein the first cell includes a diagnostic test, and wherein the test module causes the first cell to be tested by initiating the diagnostic test.

- 8. The computer system of claim 1 wherein the test module is configured to detect an error in response to testing the first cell, and wherein the test module is configured to cause remedial action associated with the error to be performed in response to detecting the error.
- 9. The computer system of claim 1 wherein the test module couples to the first cell using an I2C connection.
- 10. The computer system of claim 1 wherein the first cell comprises a processing system.
- 11. The computer system of claim 1 wherein the first cell comprises a storage system.
- 12. The computer system of claim 1 wherein the first cell comprises an input/output (I/O) system.
- 13. The computer system of claim 1 wherein the system module is configured to allocate the first cell to a second instance of the operating system subsequent to the test module testing the first cell.
- 14. A method performed by a computer system comprising: detecting that a first cell that is allocated to an operating system is to be tested;

de-allocating the first cell from the operating system; allocating a second cell to the operating system; and testing the first cell.

PATENT HPDNO: 200209704-1

15. The method of claim 14 further comprising:

detecting that the first cell is to be tested by determining a time that the first cell was previously tested.

- 16. The method of claim 14 further comprising: detecting that the first cell is to be tested by detecting a scheduled time.
- 17. The method of claim 14 further comprising: storing results associated with testing the first cell.
- 18. The method of claim 14 further comprising: allocating the first cell to the operating system subsequent to testing the cell.
- 19. A system comprising:
  - a cell allocated to an operating system;
- a first means for de-allocating the first cell from the operating system; and
- a second means for testing the cell subsequent to the cell being deallocated from the operating system.
- 20. The system of claim 19 wherein the second means is for performing electrical tests on the cell.
- 21. The system of claim 19 wherein the second means is for performing functional tests on the cell.
- 22. The system of claim 19 wherein the first means is for causing the second means to test the cell.

PATENT

HPDNO: 200209704-1

23. The system of claim 19 wherein the second means is for detecting an error in the cell in response to testing the cell, and wherein the second means is for causing remedial action to be taken in response to detecting the error.